

DOCUMENT RESUME

ED 353 085

PS 021 099

AUTHOR Morgan, Harry
TITLE Early Childhood Teacher Certification: State Tests and Preservice Knowledge Base Determinants.
PUB DATE [Apr 91]
NOTE 11p.
PUB TYPE Reports - Research/Technical (143)

EDRS PRICE MF01/PC01 Plus Postage.
DESCRIPTORS Academic Achievement; Early Childhood Education; *Licensing Examinations (Professions); *Minimum Competency Testing; *Minority Group Teachers; *Teacher Certification; *Teacher Qualifications; Test Bias; *Test Format

IDENTIFIERS *Competency Tests; Knowledge Base for Teaching; Preservice Teachers; Scholastic Aptitude Test

ABSTRACT

This study examined major characteristics of instruments commonly used in statewide teacher certification procedures and the possible relations of these characteristics to the uneven success rate among minority teaching candidates. The study analyzed raw scores and selected variables associated with 63 white female candidates who took the Georgia Teacher Certification Test in Early Childhood Education during the 1988-89 testing cycle. All candidates held a B.S. in early childhood education, and their grade point averages before and after majoring in early childhood education, as well as their Scholastic Aptitude Test (SAT) scores, were recorded. Results showed that grade point averages (GPAs) are not a gate-keeping restriction that might act to reduce the success of minority candidates. Results also indicated that the GPA achievement in the teacher preparation program does not contribute significantly to a candidate's performance on the statewide minimum competency test. A significantly high correlation between the Georgia Teacher Certification Test scores and the candidates' scores on the SAT may indicate that teacher tests for certification are proxies for other standardized instruments and might reveal some of the reasons for the disproportionate failure rate among minority teacher candidates. (MM)

* Reproductions supplied by EDRS are the best that can be made *
* from the original document. *

U.S. DEPARTMENT OF EDUCATION
Office of Educational Research and Improvement
EDUCATIONAL RESOURCES INFORMATION
CENTER (ERIC)

☒ This document has been reproduced as
received from the person or organization
originating it

☐ Minor changes have been made to improve
reproduction quality

• Points of view or opinions stated in this docu-
ment do not necessarily represent official
OERI position or policy

EARLY CHILDHOOD TEACHER CERTIFICATION: STATE TESTS AND
PRESERVICE KNOWLEDGE BASE DETERMINANTS

Harry Morgan, Professor
West Georgia College
Carrollton, GA 3011.
(404) 836-6559

"PERMISSION TO REPRODUCE THIS
MATERIAL HAS BEEN GRANTED BY

Harry Morgan

TO THE EDUCATIONAL RESOURCES
INFORMATION CENTER (ERIC)."

BEST COPY AVAILABLE

PS 021099

ED353085

EARLY CHILDHOOD TEACHER CERTIFICATION: STATE TESTS AND
PRESERVICE KNOWLEDGE BASE DETERMINANTS

Introduction

By now, even the general public is aware that black candidates, as a group, tend to score less well than their white peers on state-wide teacher certification tests. This phenomenon hardly needs documentation. There are, however, several important studies that have addressed these issues in various ways. For example, J. Irvine (1988), in her investigation identified four major reasons for the disparity. They were; (1) overall decline in education majors, (2) decline in black college students, (3) widening career options for blacks - especially females - and (4) teacher competency tests. This study will attempt to explore the more complex issues inherent in item 4 that was cited by Irvine - namely, teacher competency tests.

In various ways, the 4 categories of concern as identified by Irvine have become themes around which other investigators have framed their research problems and discussions (Garcia, 1986; Cole, 1986; Smith, et al, 1988; Haberman, 1988). An occasional dissenting view is represented in the work of Holmes (1986), who suggests that all educators - regardless of ethnicity or academic opportunity - should be held to the same requirements. Garcia (1986), has suggested that certification tests are poor predictors of many unique qualities that ethnic minorities bring

to the classroom. He points out that some of these special characteristics are essential qualities necessary for good teaching in urban and predominantly minority schools.

Purpose of the Study

This study was designed to identify some of the major characteristics inherent in instruments commonly used in state-wide teacher certification procedures. The identification of major characteristics of such tests might have implications for the uneven success rate among minority candidates who take these tests. Also, this investigation attempted to determine specific characteristics that more white candidates, than black ones, might demonstrate - as determined by raw score performance on a selected teacher certification test.

Method

The raw scores, and selected variables, associated with 63 white female candidates who took the Georgia Teacher Certification Test in Early Childhood Education during the 1988-89 testing cycle, were recorded. All candidates held a B.S. Degree in Early Childhood Education. For each candidate, means for grade point averages - before and after majoring in Early Childhood Education - as well as pre-college SAT scores were recorded. The raw scores from the Georgia Teacher Certification Test, and selected variables for the group were correlated to determine interaction between them.

The Variables

Georgia Teacher Certification Test (TCT)

The test scores that subjects achieved on the Early Childhood TCT was the independent variable against which other variables were correlated. The maximum possible score is 400. The TCT is given several times a year and a passing score is required. It purports to measure 9 objectives, which are as follows:

Objective Number	Portion of Test	Objective Title
1	6%-10%	Theories of Development & Learning
2	6%-10%	Child Development and Instruction
3	21%-25%	Language Arts
4	16%-20%	Mathematics
5	6%-10%	Science
6	6%-10%	Social Studies
7	6%-10%	Health and Physical Education
8	1%-5%	Art, Music, Dance & Dramatic Play
9	6%-10%	Assessment Procedures

SAT-V

This index is each subject's verbal score on the SAT, and contributes to the total SAT score.

SAT-M

This index is each subject's math score on the SAT, and contributes to the total SAT score.

SAT Score

The college entry level SAT score was selected as one of the dependent variables. This score is a measure of education and experiences prior to college. The SAT-M (Math), and the SAT-V (Verbal), are summed for the total SAT score.

Pre GPA

Grade point average (GPA), on a 4.0 scale was used as an index for this variable. Pre-GPA is the subject's grade point average prior to admission to teacher education, at the end of the undergraduate sophomore year. The pre-GPA would be a measure of their academic achievement in the liberal arts division of the college.

Post GPA

This variable was obtained from each subject's grade point average (GPA) at the end of their teacher preparation program. This GPA would be a composite of liberal arts core courses and teacher education courses.

Results

Means and standard deviations for all variables are displayed in Table I. Correlations of selected variables are displayed in Table II. It appears that white females in this study, "selected-in" as Early Childhood Education majors, and, are near the minimum requirement level set by the state board of regents, and followed by state-wide departments of education in colleges and universities. The group grade point average for those under study was 2.76 (c+), on a 4 point scale, while the state-wide minimum requirement is 2.50 (c+). This represents a modest .26 grade points over the minimum (Table I).

Correlations between TCT scores (the competency test), display a significant interaction between test scores and candidates' composite SAT score (.795). There also appears to be a significant interaction between subjects' TCT scores and post GPA (.553); SAT verbal (.781); and SAT math (.563), Table II.

Discussion

After completion of the program in teacher education (2 years of liberal arts and 2 years of education type courses), the group grade point average was 3.08. This represents an increase of .32 over the subject's entry level GPA of 2.76. These GPA levels suggest that academically superior students do not "select-in" to early childhood as a career choice. Those who do select-in, are on average C+ students.

This minimum academic achievement of those who select-in, indicates that the GPA phenomenon is not a "gate-keeping" restriction that might act to reduce minority candidates through competency tests. Neither does it appear that the GPA achievement in the teacher preparation program contributes significantly to how well a candidate performs on the state-wide minimum competence test. Correlations between the candidates' performance on the minimum competency test (TCT), and the post- and pre GPA are (.467), and .553), respectively (Table II). In other words, a college student's performance as measured by the grade point system is a poor index against which to determine success on the state minimum competency test (TCT).

The significantly high correlation between the Georgia Teacher Certification Test scores, and the candidates' scores on the SAT is more troubling. The teacher test under study appears to be a proxy for standardized tests like the Scholastic Aptitude Test, and tests that employ a similar format. It is precisely these instruments that perform "gate-keeping" for institutions of

higher learning by eliminating the very minorities that we want to attract to various human service professions.

If in fact teacher tests for certification are proxies for other standardized instruments, that might help to reveal some of the reasons for the disproportionate failure rate among minority teacher candidates.

TABLE I
MEANS AND STANDARD DEVIATIONS

TCT SCORE	PRE GPA	POST GPA
MEAN / SD	MEAN / SD	MEAN / SD
350.25 / 16.46	2.76 / .47	3.08 / .43
SAT TOTAL	SAT MATH	SAT VERBAL
MEAN / SD	MEAN / SD	MEAN / SD
791.75 / 131.40	407.62 / 73.63	384.13 / 80.72

TABLE II
CORRELATIONS

	TCT SCORE	PRE-GPA	POST-GPA	SAT TOTAL	SAT MATH
PRE GPA	.467				
POST GPA	.553	.774			
SAT TOTAL	.795	.367	.434		
SAT MATH	.563	.333	.372	.836	
MAT VERBAL	.781	.294	.368	.866	.448

References

- Cole, B.T. (1986). The Black Educator: An endangered species. Journal of Negro Education, 55, 3, 320-334.
- Garcia, P. (1986). The impact of national testing on ethnic minorities: With proposed solutions. Journal of Negro Education, 55, 3, 347-357.
- Haberman, M. (1988). Proposal for recruiting minority teachers: Promising practices and attractive detours. Journal of Teacher Education, 33, 4, 30-44.
- Holmes, B.J. (1986). Do not buy the conventional wisdom: Minority teachers can pass the tests. Journal of Negro Education, 55, 3, 335-340.
- Irvine, J.J. (1988). An analysis of the problem of disappearing Black educators. Elementary School Journal, 88, 5, 503-513.
- Smith, C.P. and others. (1988). A case study of the impact of performance based testing on the supply of minority teachers. Journal of Teacher Education, 33, 4, 45-53.